

Appl. No. 10/632,788
Response Dated January 3, 2007
Reply to Office action dated November 3, 2006

REMARKS/ARGUMENTS

Applicants have received and carefully reviewed the Office Action of the Examiner mailed November 3, 2006. Claims 1-23 and 25-28 remain pending. Reconsideration and reexamination are respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 1-3, 5-9, 12-18, 21-23, and 25-28 remain rejected as being unpatentable over Pittman (US 6,123,147) in view of Vlasak. Claims 19 and 20 remain rejected as being unpatentable over Pittman in view of Vlasak as applied to claim 1, and further in view of admitted prior art. Claims 4, 10, and 11 remain rejected as being unpatentable over Pittman in view of Vlasak as applied to claim 1, and further in view of Alford.

The Examiner asserts that Pittman discloses the invention substantially as claimed except for the forced air furnace. The Examiner asserts that it would have been obvious to have eliminated the modulation of the water heater of Pittman during the dehumidification operation, and to have modified the system of Pittman such that the heating and cooling systems were sized to meet the expected heating and cooling loads in order to eliminate the need for any additional heating and cooling units. The Examiner cites Vlasak as teaching the use of a forced air furnace to provide heating to an inside space, and asserts that it would have been obvious to have modified the system of Pittman such that it used a forced air furnace in order to provide the heating rather than a hot water coil in view of the teachings of Vlasak. Applicants respectfully traverse the rejections.

The Examiner has provided no motivational reasoning as to why one of ordinary skill in the art would modify the device and method of Pittman with the teachings of Vlasak. Vlasak appears to merely teach a forced air furnace with a thermostat, and provides no motivation for modifying the system of Pittman. Pittman likewise provides no motivation for its modification. The only statement regarding why one of ordinary skill in the art would have been motivated to

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modify the system of Pittman with the forced air furnace of Vlasak is "in order to provide the heating rather than hot water coil in view of the teachings of Vlasak." See page 3, lines 9-10 of the Office Action. Vlasak teaches a thermostat for a heating or cooling system, and appears to be completely silent regarding the operation of their furnace at the same time as a cooling unit. Since Vlasak and Pittman fail to provide any motivation for modifying the system of Pittman, and the Examiner has not provided any other motivational reasoning, it would appear that the Examiner is relying on either Applicants' own specification or the mere fact that the references could be combined or modified as the motivation for making the combination, both of which are known to be improper.

MPEP 2143.01 III. states that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)." and "[a]lthough a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992)." MPEP 2143.01 IV. states:

because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Int. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000)... *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.).

(Emphasis added). Applicants submit that there is no motivation for one of ordinary skill in the art to combine the teachings of Pittman and Vlasak as the Examiner suggests. Vlasak teaches a thermostat for a heating or cooling system. Applicants submit that neither reference provides any motivation, suggestion, or guidance for combining their teachings as the Examiner suggests.

The Examiner has not addressed the above arguments, which were presented in the previous response. Applicants submit that the Examiner's statement that it would have been

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obvious to modify the system of Pittman such that it used a forced air furnace rather than the hot water coil "in view of the teachings of Vlasak" does not provide the necessary motivation for an obviousness rejection. It appears that the Examiner is relying either on the level of skill in the art or Applicants' own specification for the motivation to combine the references, both of which are improper. If this rejection is maintained, the Examiner is respectfully requested to point to where in the prior art motivation for combining the references can be found, or to provide reasoned statements as to why one of ordinary skill in the art would have been motivated to substitute the furnace of Vlasak for the hot water coil specifically taught by Pittman.

The references are directed to very different systems and methods. Pittman teaches using a conventional hot water heater 32 to heat air that has been dehumidified, while Vlasak teaches a thermostat for stabilizing heating system cycle periods and dissipating heat at a substantially constant rate in a system having a forced air furnace. The methods and systems are so different in their structure, function and results, that their combination appears to be contrary to the teachings of each reference.

Additionally, the fact that Pittman teaches his system as being "easily retrofitted or added to a residential air conditioning system" (column 1, lines 41-42), indicates that the Pittman system is added to a residential HVAC system already having a furnace, and that, according to Pittman, the hot water heater should be used as the source of heat to reheat air exiting from the refrigeration coils, and NOT the furnace. As such, Applicants submit that Pittman actually teaches away from the claimed method because Pittman teaches a system using hot water from a conventional hot water heater for reheating air instead of the existing furnace.

The fact that Pittman teaches using a hot water heater for reheating air instead of the furnace already present in a residential HVAC system of Pittman appears to be a direct teaching away from the claimed methods, and clearly teaches away from a combination with Vlasak. Applicants submit that, upon reading Pittman's teaching of using a conventional hot water heater to reheat the air, instead of the existing furnace, one of ordinary skill in the art would have no motivation for removing the very elements taught by Pittman as his invention in order to achieve the method recited in claim 1. This is particularly so since the heat output of a forced air furnace

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is typically very different (e.g. much greater) from that of a conventional water heater, and results would likely be very different.

In response to the above arguments, the Examiner asserts that the assertion that Pittman teaches away from a forced furnace and thus cannot be combined with Vlasak is considered moot because it is noted that Pittman teaches forced air furnaces are conventional and well known in the art to be used in residential air conditioning systems. Applicants agree that Pittman teaches forced air furnaces are conventional and known to be used with air conditioning systems. However, the fact that Pittman teaches forced air furnaces as conventionally used in combination with an air conditioning system but then specifically teaches using the hot water coil from the residential hot water heater instead of the furnace appears to be a direct teaching away from using the furnace. Applicants submit that just because Pittman teaches forced air furnaces are conventional and used with air conditioning systems does not provide any suggestion or motivation for one of ordinary skill in the art to substitute a forced air furnace for the hot water coil specifically taught by Pittman for use in his system.

The Examiner then asserts that the broadest reasonable interpretation of a forced air furnace could be considered as any unit that is able to provide heat. It appears the Examiner is asserting the hot water coil of Pittman fits the broadest reasonable interpretation of a forced air furnace. Applicants respectfully disagree. Applicants do not understand how, even given a very broad reading of "forced air furnace", one of ordinary skill in the art would equate this with a hot water coil. MPEP 2111 states:

the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification."

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *In re Corthright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

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(Emphasis added). Applicants submit that "forced air furnace" is a phrase known and understood by one of ordinary skill in the art, and would clearly not be interpreted as including a hot water heater coil, as suggested by the Examiner. The phrase "forced air", in particular, cannot be ignored. As is readily understood by those skilled in the art, a "forced air" furnace is a heating unit that is typically fitted with a fan or blower to force the heated air through the ducts of a house or other building, which clearly does not include a hot water heater as suggested by the Examiner. Moreover, the meaning of forced air furnace is clearly distinguished from a hot water heater by Pittman itself - because Pittman describes the two systems separately.

Further, even if one were to combine the teachings of Pittman and Vlasak, one would not arrive at the claimed invention. A combination of Pittman and Vlasak would appear to suggest replacing the hot water heater of Pittman with an additional furnace in order to reheat air exiting from the refrigeration coils. Applicants submit that such a combination does not teach each and every element of the claims.

Neither Pittman nor Vlasak, alone or in combination, teach or suggest the elements of the independent claims or the claims dependent thereon. Alford does not provide what Pittman and Vlasak lack. Reconsideration and withdrawal of the rejections are respectfully requested.

In view of the foregoing, all pending claims 1-23 and 25-28 are believed to be clearly in condition for allowance. Reconsideration and reexamination are respectfully requested. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-359-9348.

Respectfully Submitted,



Date: January 3, 2006

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